

WHAT IS CLAIMED IS:

- 1 1. A method for call handling, comprising:
 - 2 initiating a dialog between a user and an automated call handling system;
 - 3 receiving input from a user in response to an input request by the system;
 - 4 sending a human operator the user input, if the system can not interpret the
 - 5 user input;
 - 6 providing the system with an interpreted response generated by the operator
 - 7 based on the user input;
 - 8 continuing the dialog between the user and the system if the interpreted
 - 9 response is confirmed by the user; and
 - 10 connecting the user to the operator if the interpreted response is not confirmed
 - 11 by the user.
- 1 2. The method of claim 1 wherein the call handling system is an Interactive
- 2 Voice Response system.
- 1 3. The method of claim 1:
 - 2 wherein the receiving element includes,
 - 3 incrementing an Item Wide Frustration Index, if the system can not
 - 4 interpret the user input; and
 - 5 repeating the input request, if the Item Wide Frustration Index is below
 - 6 a predetermined Item Wide Frustration Threshold; and
 - 7 wherein the sending element includes:
 - 8 sending the human operator the user input, if the Item Wide Frustration
 - 9 Index is above the predetermined Item Wide Frustration Threshold; and
 - 10 resetting the Item Wide Frustration Index back to an initial value.

1 4. The method of claim 1:
2 wherein the sending element includes,
3 sending a human operator contextual information with respect to the
4 input request and a set of user inputs generated by the user in response to the
5 input request; and
6 wherein the providing element includes,
7 permitting the operator to view the contextual information; and
8 playing back the user inputs for the operator.

1 5. The method of claim 1 further comprising:
2 connecting the user to the operator if the user begins to speak out of context.

1 6. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a fixed value.

1 7. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon an importance attribute associated with the user.

1 8. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon a personality attribute associated with the user.

1 9. The method of claim 3 wherein the initiating element includes:

2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon a frustration tolerance associated with the user.

1 10. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon a patience attribute associated with the user.

1 11. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon a physical attribute associated with the user.

1 12. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon a call connection attribute associated with the user.

1 13. The method of claim 3 wherein the initiating element includes:
2 setting the Item Wide Frustration Threshold to a predetermined value
3 dependent upon an operator availability attribute associated with the system.

1 14. The method of claim 3, wherein the sending element includes:
2 incrementing a Transaction Wide Frustration Index if the Item Wide
3 Frustration Index is above the predetermined Item Wide Frustration Threshold;
4 providing the operator with an option to connect to the user if the Transaction
5 Wide Frustration Index is above a first Transaction Wide Frustration Threshold; and
6 connecting the user to the operator if the Transaction Wide Frustration Index is
7 above a second Transaction Wide Frustration Threshold.

1 15. A method for call handling, comprising:
2 initiating a dialog between a user and an automated call handling system;
3 receiving input from a user in response to an input request by the system;
4 sending a human operator the user input, if the system can not interpret the
5 user input;
6 providing the system with an interpreted response generated by the operator
7 based on the user input;
8 continuing the dialog between the user and the system if the interpreted
9 response is confirmed by the user;
10 connecting the user to the operator if the interpreted response is not confirmed
11 by the user; and
12 wherein the receiving element includes,
13 incrementing an Item Wide Frustration Index, if the system can not
14 interpret the user input; and
15 repeating the input request, if the Item Wide Frustration Index is below
16 a predetermined Item Wide Frustration Threshold; and
17 wherein the sending element includes,
18 sending the human operator the user input, if the Item Wide Frustration
19 Index is above the predetermined Item Wide Frustration Threshold; and
20 resetting the Item Wide Frustration Index back to an initial value; and
21 wherein the sending element includes,
22 incrementing a Transaction Wide Frustration Index if the Item Wide
23 Frustration Index is above the predetermined Item Wide Frustration Threshold;

24 providing the operator with an option to connect to the user if the
25 Transaction Wide Frustration Index is above a first Transaction Wide
26 Frustration Threshold; and
27 connecting the user to the operator if the Transaction Wide Frustration Index is
28 above a second Transaction Wide Frustration Threshold.

1 16. A system apparatus for call handling, comprising a:
2 means for initiating a dialog between a user and an automated call handling
3 system;
4 means for receiving input from a user in response to an input request by the
5 system;
6 means for sending a human operator the user input, if the system can not
7 interpret the user input;
8 means for providing the system with an interpreted response generated by the
9 operator based on the user input;
10 means for continuing the dialog between the user and the system if the
11 interpreted response is confirmed by the user; and
12 means for connecting the user to the operator if the interpreted response is not
13 confirmed by the user.

1 17. A system for automated call handling, comprising:
2 a set of modules, for initiating a dialog with a user and receiving input from
3 the user in response to an input request;
4 a dialog router, for routing user and system information;
5 an operator, and
6 a dialog manager,

7 for sending the operator the user input, if the system can not interpret
8 the user input;
9 for receiving an interpreted response from the operator based on the
10 user input;
11 for continuing the dialog between the user and the system if the
12 interpreted response is confirmed by the user; and
13 for connecting the user to the operator through the dialog router if the
14 interpreted response is not confirmed by the user.

1 18. The system of claim 17, further comprising:
2 a dialog record, for storing a record of the dialog between the user and the
3 system.